

SV

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	09/806,368A							
Source:	PCT09							
Date Processed by STIC:	4122102							

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or.
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- 3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

 Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



Does Not Comply
Corrected Diskette Needed

PCT09

RAW SEQUENCE LISTING - DATE: 04/22/2002
PATENT APPLICATION: US/09/806,368A TIME: 14:21:00

Input Set : A:\447.001.txt

Output Set: N:\CRF3\04222002\1806368A.raw

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W--> 8 1
     13 <110> APPLICANT: Hoechst Marion Roussel
     15 <120> TITLE OF INVENTION: MATURE PROTEIN HAVING ANTAGONIST ACTIVITY AGAINST BONE
              MORPHOGENETIC PROTEIN.
     18 <130> FILE REFERENCE: JH98KOll PCT SEQUENCES IN ENGLISH
C--> 20 <140> CURRENT APPLICATION NUMBER: US/09/806,368A
C--> 21 <141> CURRENT FILING DATE: 2001-03-28
     23 <150> PRIOR APPLICATION NUMBER: 10-288103
     24 <151> PRIOR FILING DATE: 1998-10-09
     26 <160> NUMBER OF SEQ ID NOS: 7
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ERRORED SEQUENCES
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     31 <211> LENGTH: 119
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     36 <221> NAME/KEY: CHAIN
     37 <222> LOCATION: (1)..(119)
     38 <223> OTHER INFORMATION: Mature MP52
     40 <300> PUBLICATION INFORMATION:
     41 <301> AUTHORS: MAKISHIMA, Fusoa
     42
              TAKAMATSU, Hiroyuki
     43
              MIKI, Hideo
     44
             KAWAI, Shinji
     45
             KIMURA, Michio
     46
             MATSUMOTO, Tomoaki
     47
             KATSUURA, Mieko
     48
             ENOMOTO, Koichi
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              O 00/21998 PCT/IB99/01621
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             SATOH, Yusuke
     70 <302> TITLE: Novel protein and process for producing the same.
     71 <310> PATENT DOC NO: WO 96/33215
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DATE: 04/22/2002

TIME: 14:21:00

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                      Output Set: N:\CRF3\04222002\I806368A.raw
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     84
     86
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     87
     89
            Ala Val Ile Gln Thr Leu Met Asn Ser Met Asp Pro Glu Ser Thr Pro
     90
     92
            Pro Thr Cys Cys Val Pro Thr Arg Leu Ser Pro Ile Ser Ile Leu Phe
     93
                                                   90
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     133 <300> PUBLICATION INFORMATION:
     134 <301> AUTHORs: WANG, Elizabeth A.
               WOZNEY, John M.
     135
     136
               ROSEN, Vicki A.
     137 <302> TITLE: Novel osteoinductive compositions.
     138 <310> PATENT DOC NO: WO 88/00205
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                                                                                    Minushial armine
Minushial destinator
     145
                                                   10
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             His Pro Leu Tyr Val Asp Phe Ser Asp Val Gly Trp Asn Asp Trp Ile
     148
     150
             Val Ala Pro Pro Gly Tyr His Ala Phe Tyr CYs His Gly Glu Cys Pro
     151
                                           40
                                                                45
     153
             Phe Pro Leu Ala Asp His Leu Asn Ser Thr Asn His Ala Ile Val Gln
                                                                                    Amino Delid
                                                            60
E--> 154
                                  55
                                                                                       numbering
E--> 156
             Thr Leu Val Asn Ser Val Asn Ser Lys Ile Pro(Lvs) Ala Cys Cys Val
                                                        75
E--> 157
                                   70
    159
             Pro Thr Glu Leu Ser Ala Ile Ser Met Leu Tyr Leu Asp Glu Asn Glu
                                                                                       - Some enco
E--> 160
                                                   90
             Lys Val Val Leu Lys Asn Tyr Gln Asp Met Val Val Glu Gly Cys Gly
     162
     163
             100
                                  105
E--> 164
             Cys Arg
     181 WO 00/21998
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/806,368A

DATE: 04/22/2002 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/806,368A TIME: 14:21:00 Input Set : A:\447.001.txt Output Set: N:\CRF3\04222002\I806368A.raw - delet E--> 184 187 <210> SEQ ID NO: 3 188 <211> LENGTH: 116 189 <212> TYPE: PRT 190 <213> ORGANISM: Human 192 <220> FEATURE: 193 <221> NAME/KEY: CHAIN 194 <222> LOCATION: (1)..(116) 195 <223> OTHER INFORMATION: Mature BMP-4 197 <300> PUBLICATION INFORMATION: 198 <301> AUTHORS: WOZNEY, John M. ROSEN, Vicki 199 CELESTE, Anthony J. 200 MITSOCK, Lisa M. 201 WHITTERS, Matthew J. 202 KRIZ, Ronald W. 203 HEWICK, Rodney M. 204 WANG, Elizabeth A. 205 206 <302> TITLE: Novel regulators of bone formation molecular clones 207 and activities. 208 <303> JOURNAL: Science 209 <304> VOLUME: 242 210 <305> ISSUE: 4885 C/M22490 Olobbose entry date 1.823
13097 - Nobbose entry date per Son 1.823
15 required - per of the new Rule. 211 <306> PAGES: 1528-1534 212 <307> DATE: 1988-12-16 213 <308> DATABASE ACCESSION NO: Genbank/M22490 214 <313> RELEVANT RESIDUES: 1 TO 116 W--> 216 <300> PUBLICATION INFORMATION: 3 Ser Pro Lys His His Ser Gln Arg Ala Arg Lys Lys Asn Lys Asn Cys 217 10 218 5 Arg Arg His Ser Leu Tyr Val Asp Phe Ser Asp Val Gly Trp Asn Asp E--> 220 25 E--> 221 Trp Ile Val Ala Pro Pro Gly Tyr Gln Ala Phe Tyr Cys His Gly Asp 223 40 E--> 224 (PCT/IB99/01621 WO 00/21998 239 5 E--> 241 Cys Pro Phe Pro Leu Ala Asp His Leu Asn Ser Thr Asn His Ala Ile 244 60 55 E--> 245 Val Gln Thr Leu Val Asn Ser Val Asn Ser Ser (71 e)Pro Lys Ala Cys E--> 247 75 70 E--> 248 Cys Val Pro Thr Glu Leu Ser Ala Ile Ser Met Leu Tyr Leu Asp Glu 250 90 E--> 251Tyr Asp Lys Val Val Leu Lys Asn Tyr Gln Glu met Val Val Glu Gly 253 105 110 100 E--> 254 256 Cys Gly Cys Arg

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115

E--> 257

RAW SEQUENCE LISTING DATE: 04/22/2002 PATENT APPLICATION: US/09/806,368A TIME: 14:21:00

Input Set : A:\447.001.txt

Output Set: N:\CRF3\04222002\I806368A.raw

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           268 <222> LOCATION: (1)..(139)
           269 <223> OTHER INFORMATION: Mature BMP-7
           271 <300> PUBLICATION INFORMATION:
           273 <301> AUTHORS: OZKAYNAK, Engin
                                  RUEGER, David C.
           274
                                  DRIER, Eric A.
           275
                                  CORBETT, Clare
           276
                                  RIDGE, Richard J.
           277
                                  SAMPATH, Kuber T.
           278
           279
                                  OPPERMANN, Hermann
           280 <302> TITLE: OP-1 cDNA encodes an osteogenic protein in the TGF-beta
                                  family.
           281
                                  WO 00/21998 PCT/IB99/01621
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           296
           300 <303> JOURNAL: EMBO J.
           301 <304> VOLUME: 9
           302 <305> ISSUE: 7
           303 <306> PAGES: 2085-2093
           305 <308> DATABASE ACCESSION NO: EM13L data library/X51801
306 <313> RELEVANT RESIDUES: 1 TO 139
308 <300> PUBLICATION TO THE PROPERTY AND THE PROPERTY TO THE
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           311
                              Asn Gln Glu Ala Leu Arg Met Ala Asn Val Ala (G7-u Asn Ser Ser Ser
E--> 313
                                                                                                            25
           314
                                                            20
                              Asp Gln Arg Gln Ala Cys Lys Lys His Glu Leu Tyr Val Ser Phe Arg
           316
           317
                                                                                                  40
                              Asp Leu Gly Trp Gln Asp Trp Ile Ile Ala Pro Glu Gly Tyr Ala Ala
           319
                                                                                         55
           320
                              Tyr Tyr Cys Glu Gly Glu Cys Ala Phe Pro Leu Asn Ser Tyr Met Asn
           322
                                                                                                                                                                              80
                                                                                                                               75
E--> 323
                                                            70
                              Ala Thr Asn His Ala Ile Val Gln Thr Leu Val His Phe Ile Asn Pro
           325
                                                                                                                                                                     95
                                                                                                                     90
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E--> 326
                              Glu Thr Val Pro Lys Pro Cys Cys Ala Pro Thr Gln Leu Asn Ala Ile
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                                                                                                         105
E--> 329
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E--> 332
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RAW SEQUENCE LISTING

DATE: 04/22/2002 TIME: 14:21:00 PATENT APPLICATION: US/09/806,368A

Input Set : A:\447.001.txt

Output Set: N:\CRF3\04222002\1806368A.raw

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                                                                                 axime pilenul-
                                                                                    acid designata
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             Pro Leu Ala Thr Arg (Gin Gly Lys Arg Pro Ser Lys Asn Leu Lys Ala
E--> 370
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     371
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             Asp Asp Trp Ile Ile Ala Pro Leu Glu Tyr Glu Ala Phe His Cys Glu
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                                  70
     383
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                                                   90
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     420
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             Arg Cys Ser Arg Lys Ala Leu His Val Asn Phe Lys Asp Met Gly Trp
     428
                                               25
     429
             Asp Asp Trp Ile Ile Ala Pro Leu Glu Tyr Glu Ala Phe His Cys Glu
     431
                                           40
     432
             Gly Leu Cys Glu Phe Pro Leu Arg Ser His Leu Glu Pro Thr Asn His
     434
                                                            60
     435
             Ala Val Ile Gln Thr Leu Met Asn Ser Met Asp Pro Glu Ser Thr Pro
     437
                                                       75
                                   70
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             Pro Thr Cys Cys Val Pro Thr Arg Leu Ser Pro Ile Ser Ile Leu Phe
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                                                   90
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                          100
                                              105
     444
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/806,368A

DATE: 04/22/2002 TIME: 14:21:00

Input Set : $A: \447.001.txt$

Output Set: N:\CRF3\04222002\1806368A.raw

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	447			115														d	elefe
	(464	WO	00/2	1998										PCT,	/IB9	9/01	521)	
E>	466							_	9										
•	469	<210> S	EQ II	ON C	: 7														
	470	<211> L	ENGT	H: 1	19														
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	472	<213> ORGANISM: Human																	
	474	<220> FEATURE:																	
		<221> N2	•																
		<222> Lo																	
	477	<223> 09	THER	INF	ORMAT	CION	: Mat	ture	MP5	2 pro	otei	n. No	ote	:32n	d and	d 35	th Tr	o are	
	478				to al	Llyl	sulph	neny.	l Tr	p.									
		<400> S					$\overline{}$												
E>	_	Pro	Leu	Ala	Thr	Arg	(Gin)	Gly	$_{\mathtt{Lys}}$	Arg	Pro	Ser	Lys	Asn	Leu	_	Ala		
	483	1				5					10					15			
	485	Arg	Cys	Ser	Arg	Lys	Ala	Leu	His		Asn	Phe	Lys	Asp		Gly	${ t Trp}$		· / 1 ' /-
	486	_	_	_	20	_ •		_	_	25	_			·	30	_			Circled Tlerys
	488	Asp	Asp	_	Ile	Ile	Ala	Pro		GLu	Tyr	Glu	Ala		His	Cys	Glu	·	
	489	a 1	_	35	-1	-1	_	_	40	_	•	_		45	1	_	•		One involid
	491	GIA		_	Glu	Phe	Pro		Arg	Ser	His	Leu		Pro	Thr	Asn	His		2 100 - 21
	492	_ •	5((A)	١	_	55	_	_		_	_60		_		_		Swive acid
E>			Val	те	(Gin	Thr		Met	Asn	ser	Met		Pro	GIU	Ser	Thr			circled items are invalid zunino acid clesic, nators!
	495	65 Date:	m 1	G	a	11-1	70	mh	7	T	O	75	т1.	a	т1.	T	80		alegrania.
	497	PIO	Thr	Cys	Cys	85	PLO	Thr	Arg	Leu		PIO	тте	ser	шe	ьеи 95	Pne		•
	498	7 1 -	3	O	31.		B	17-7	17-1	M	90		\ CT	~1	B ===		17-1		
E>		ııe	Asp	ser	Ala 100	ASN	ASN	vaı	Val		Lys(Gin	TYL	GIU		met	Val		
	501 503	Wa 1	Clu	C02		C1**	Cvc	7 ~~		105					110				
	504	Val	GIU	115	Cys	сту	Cys	AIG											
	204			117															

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/806,368A

DATE: 04/22/2002
TIME: 14:21:01

Input Set : A:\447.001.txt

Output Set: N:\CRF3\04222002\I806368A.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:2; Line(s) 162

VERIFICATION SUMMARY

DATE: 04/22/2002 TIME: 14:21:01 PATENT APPLICATION: US/09/806,368A

Input Set : A:\447.001.txt

Output Set: N:\CRF3\04222002\I806368A.raw

L:6 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION: L:8 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION: L:20 M:270 C: Current Application Number differs, Replaced Application Number L:21 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:72 M:256 W: Invalid Numeric Header Field, Wrong PUBLICATION DATE:YYYY-MM-DD L:78 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1 L:123 M:259 W: Allowed number of lines exceeded, <213> ORGANISM: L:125 M:259 W: Allowed number of lines exceeded, <213> ORGANISM: L:154 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2 L:156 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1 M:332 Repeated in SeqNo=2 L:216 M:256 W: Invalid Numeric Header Field, Identifier <309> Expected, SEQ:3 L:220 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3 M:332 Repeated in SeqNo=3 L:247 M:333 E: Wrong sequence grouping, Amino acids not in groups! L:247 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1 L:308 M:256 W: Invalid Numeric Header Field, Identifier <309> Expected, SEQ:4 L:313 M:333 E: Wrong sequence grouping, Amino acids not in groups! L:313 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1 L:323 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4 M:332 Repeated in SeqNo=4 L:370 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1 L:409 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5 L:466 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:6 L:482 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1 L:494 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1 L:500 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/806, 368A
attn: new rules cases	: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3 Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
0Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
1Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
2PatentIn 2.0 ~ "bug" .	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
3Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001